

CLAIMS

- 1. A computer farm, comprising a bus (7) on which is simulated a local area network between several processor cards $(3\underline{a}-3\underline{h})$ mounted on the bus, wherein:
- each card comprises, on the one hand, stored in a nonvolatile memory (9), a test function (11) which implements, upon execution thereof, at least part of the functionalities required for simulating the local area network on the card and performs a given calculation so as to provide a result, and, on the other hand, a module for executing the test function, which continuously scans a predefined parameter memory area (8) of the card and, when it detects a value written to the parameter memory area, triggers execution of the test function with said value as parameter,
- the farm comprises a test means which periodically executes the following operations:
 - writing, to the parameter memory area (8) of each of the processor cards,
 of a value (P) specific to each processor card and to each write, by a bus
 write cycle which is independent of the operation of the simulated network,
 - execution of the same calculation as the test function, taking said value as parameter, so as to obtain a reference result,
 - retrieval of the result of the calculation performed by the test function of the processor card,
 - comparison with the reference result,
 - should there be a difference between the two results, triggering of a processor card retrofit action.
- 2. The computer farm as claimed in claim 1, wherein the value (P) written to the parameter memory area (8) depends in particular on the location of the card on the bus.
- 3. The computer farm as claimed in either one of claims 1 and 2, wherein the retrofitting of the card consists in its reinitialization.
- 4. The computer farm as claimed in any one of claims 1 to 3, wherein the bus is of PCI or CompactPCI type.
- 5. The computer farm as claimed in any one of claims 1 to 4, wherein the local area network is an Ethernet network.